

Remarks: Claims 1-7 and 10-18 are in condition for allowance

This is in response to the Final Office Action dated April 23, 2009, in which claims 1-7 and 9-16 were pending and were rejected, and the Advisory Action dated August 3, 2009, in which these rejections were reaffirmed. This response is also timely filed in reply to the notice of non-compliant amendment dated November 19, 2009. The applicants filed a Request for Continuing Examination (RCE) with the appropriate fee, and amend claims 1, 4-6, and 14, cancel claim 9, and add new claims 17 and 18. The applicants respectfully request reconsideration and withdrawal of the rejections of claims 1-7 and 10-16 and allowance of claims 1-7 and 10-18 in light of the amendments and remarks herein.

Olson, Aoyama, and Vallot do not disclose or suggest all elements of claims 1-7 and 10-16 as amended

In the Office Action, claims 1, 2, 7, and 9-16 were rejected under 35 U.S.C. §103(a) with reference to Olson (U.S. Patent No. 6,032,818) combined with Aoyama (U.K. Patent Application No. 2,117,736), and claims 3-6 were rejected under 35 U.S.C. §103(a) with reference to Olson combined with Aoyama and Vallot (U.S. Patent No. 5,988,422). Of these, claim 9 is canceled herein. The applicants respectfully submit that Olson and Aoyama do not make obvious claims 1, 2, 7, and 10-16 as amended, and that Olson, Aoyama and Vallot do not make obvious claims 3-6, due at least to the lack of disclosure or suggestion in these references of a combination wherein the bag is folded along an upper axis and a lower axis to define a U shape, with a bottom section of the bag that adjoins a base end of the channel and is configured to flap open around the lower axis and expand as it collects a first portion of liquid received in the bag.

For example, Olson discloses that the liner unfolds symmetrically around a symmetry line 7 of the liner (e.g. col. 5, lines 42-50) as the liner is filled. This symmetrical unfolding occurs in tandem with the action of the compressible tube-shaped liner 45, which is required to guide the infilling liquid and which must be bunched up by the filling action until it is forced off the liner and ends up around the top opening (e.g. col. 5, lines 42-56).

Olson therefore does not disclose or suggest a bag folded along an upper axis and a lower axis to define a U shape. Olson also does not disclose or suggest a bottom section of the bag that adjoins a base end of the channel and is configured to flap open around the lower axis and expand as it collects a first portion of liquid received in the bag. Olson discloses pursuing a similar purpose requiring the additional complexity and potential cause of malfunction of the collapsible tube-shaped cover. Therefore, the present claims provide subject matter that is not disclosed by Olson and that provides substantial advantages not made obvious or suggested by Olson.

This non-obviousness persists when Olson is combined with Aoyama. Aoyama discloses that the bag is folded as shown in FIG. 6 before liquid is introduced into it, and that it expands to the state shown in FIG. 7 after liquid is introduced into it (e.g. Aoyama p. 2, lines 43-46; p. 2, line 62 – p. 3, line 6). The opposing face of the bag from the face that includes the hole therefore expands straight horizontally away from the face with the hole, with the intermediate, folded sides unfolding. This also does not disclose or suggest either a bag folded along an upper axis and a lower axis to define a U shape; or a bottom section of the bag that adjoins a base end of the channel and is configured to flap open around the lower axis and expand as it collects a first portion of liquid received in the bag. Aoyama does not disclose or suggest the bag being folded along an upper or lower axis, or defining a U shape, or a channel, or a bottom section of the bag adjoining a base end of a channel, or a bottom section of the bag configured to flap open around a lower axis.

The range of possibilities disclosed or suggested by the combination of Olson and Aoyama therefore does not encompass or suggest the subject matter of the present claims 1 or 14 as amended. The applicants also submit that Olson and Aoyama do not disclose or suggest the subject matter of claims 2-7, 10-13, 15, or 16, due at least to the same reasons as for claims 1 and 14 by their incorporation of the same subject matter by dependency. The applicants therefore respectfully submit that Olson, Aoyama, and Vallot do not make obvious claims 1-7 and 9-16, and respectfully request that the rejection of these claims be reconsidered and withdrawn.

There was no sufficient rationale to combine Olson, Aoyama, and Vallot

The applicants also respectfully submit that Olson and Aoyama do not make obvious claims 1, 2, 7, and 10-16, and that Olson, Aoyama and Vallot do not make obvious claims 3-6, due at least to the lack of a proper reason to combine the references without impermissible hindsight, and to the teaching away of the references from the claimed combination.

As articulated by the U.S. Supreme Court in *KSR*, multiple references (from analogous fields of art) may validly be combined if a person of both ordinary skill and creativity in the art would have had a motivation or reason to combine the references. *KSR International Co. v. Teleflex Inc. (KSR)*, 550 U.S. 398, 82 USPQ2d 1385 (2007). As subsequently interpreted by the Court of Appeals for the Federal Circuit in *Ortho-McNeil*, this means that the combined references must show only a small or easily traversed number of identified, predictable solutions, to support a valid showing that a person in the art would have perceived a reason to combine them. *Ortho-McNeil Pharma. v. Mylan Labs*, 86 USPQ2d 1196, 1201 (Fed. Cir. 2008).

Vallot is sufficiently different from the art of Olson and Aoyama that the combination of all three does not show only a small or easily traversed number of identified, predictable solutions, as required by the Federal Circuit in *Ortho-McNeil* for finding obviousness. Vallot is from the art of pharmaceutical sachets, and describes only a simple sachet without a surrounding box, not a combination of a bag in a box. The applicants respectfully submit that a person of ordinary skill in the art of combination bag-in-box containers would not have looked to boxless pharmaceutical sachets for solutions in addressing shortcomings of combination bag-in-box containers.

Additionally, the two central references applied to the present claims, Olson and Aoyama, both have substantial differences from claim 1 and the other claims of the present application, such that the present claims do not lie within a small or easily traversed number of identified, predictable solutions discernable from the combination of references.

As one illustrative example thereof, Olson teaches an additional structural element in cover 45 that the device relies on for facilitating the filling of the inner packing (col. 4, lines 65-67). This tube-shaped cover must be caused to slide on the outside of the liner toward the opening 6, to be

compressed into folds, to form a constriction that forces the fluid into the free liner portion at the bottom of the container for controlled filling, and to end up forced off the liner (col. 5, lines 43-56). Therefore, Olson teaches this extra element with its own extra structural and procedural complications, which are all extraneous to the present application and which multiply the number of options that must be traversed to start out from the cited art and get to the present claims. These aspects of Olson also pose a more complicated and cumbersome way of accomplishing what the channel of the present application inherently accomplishes with an advantageously simpler mechanism, that was manifestly not one of a small number of perceived solutions in the disclosure of Olson, whether or not also combined with Aoyama.

Aoyama on the other hand expresses concern for ease of pouring a liquid back out of the container (p. 6, lines 23-25), yet teaches meeting this need with only a single opening on the top of the container (p. 6, lines 18-25). Therefore Aoyama not only further multiplies the number of options covered by the combination of cited art, and excludes various aspects of the present claims from the options it envisions, but Aoyama also actually “teaches away” from a design with a second hole at the bottom of the container as a way of facilitating emptying the container of a fluid. This explicit teaching away from the present application forms positive evidence against the existence of a valid reason to combine, and must be considered as evidence of dissuasion from making the combination, as part of considering the evidence of the collected references as a whole, rather than using impermissible hindsight from the present application to cherry-pick only those elements from the collected references that would support obviousness.

Olson and Aoyama also do not disclose or suggest the subject matter of claims 2, 7, and 9-13 due at least to the subject matter incorporated therein by dependency on claim 1, or of claims 14-16 due at least to the subject matter thereof that is analogous to that of claim 1, and Olson, Aoyama and Vallot do not disclose or suggest the subject matter of claims 3-6 due at least to the subject matter incorporated therein by dependency on claim 1, pursuant to the discussion above of the non-obviousness of claim 1. The applicants therefore respectfully submit that Olson, Aoyama, and Vallot do not make obvious claims 1-7 and 9-16, and respectfully request that the rejection of these claims be reconsidered and withdrawn.

New claim 17 is novel and non-obvious over the cited references

The applicants respectfully submit that new claim 17 is novel and non-obvious over the cited references due at least to the lack of disclosure in the cited references of a combination in which the first opening and second opening are fixed to the walled enclosure by means that include connection stubs and retaining members, in combination with the other subject matter of claim 1 on which claim 17 is dependent, which is not made obvious by Olson and Aoyama by the rationale as laid out above with reference to claim 1. While Aoyama does disclose a cylindrical mount, and Vallot discloses a flange with chimneys and connectors, the applicants respectfully submit that the connection stubs and retaining members of claim 17 and as disclosed in the present application, in combination with the subject matter of claim 1, are not made obvious by the collected references.

New claim 18 is novel and non-obvious over the cited references

The applicants respectfully submit that new claim 18 is novel and non-obvious over the cited references due at least to the lack of disclosure in the cited references of a combination comprising a container and an empty bag wherein the fold line of the third sheet and the fold line of the fourth sheet in the initial state are separated from each other by a distance such that a majority of the diameter of the first opening lies between the fold line of the third sheet and the fold line of the fourth sheet in the initial state. This aspect of claim 18 is clearly depicted, for example, in FIGS. 1a and 1b of the present application, and described in terms including that the fold lines may lie within the area or imprint of the opening, and have a distance between the fold lines that can, for example, be less than the diameter of the opening, while clearly defining a distance or gap between the fold lines that coincides with a majority of the diameter of the opening.

The cited references do not show or suggest the subject matter of claim 18. For example, Olson discloses only an opening in a flat sheet that is opposed by another flat sheet, without fold lines of interspersed bag faces proximate to the opening, and therefore no channel. Olson instead

relies on the separate element of a collapsible, tube-shaped cover to guide the path of inflowing liquid into the bag.

Aoyama discloses an inner bag with folded side panel portions inserted between the flat side panel portions. However, Aoyama teaches that the folded side panel portions have no gap between their fold lines in the folded state. For example, Aoyama teaches that the side panel portions are folded inside along fold lines which are positioned at the center of the unfolded side panel portions (e.g. p. 2, lines 38-40). This is depicted also in FIG. 6 of Aoyama, which also clearly shows the fold lines of the folded side panel portions coinciding immediately adjacent to each other along the center of the positions of the flat side panel portions. Aoyama therefore clearly does not teach or suggest a combination wherein the fold line of the third sheet and the fold line of the fourth sheet in the initial state are separated from each other by a distance such that a majority of the diameter of the first opening lies between the fold line of the third sheet and the fold line of the fourth sheet in the initial state. Aoyama also therefore does not teach a channel defined by the distance between the fold lines, capable of receiving an initial portion of an inflowing liquid in the opening and facilitating the flow of that initial portion downward through the channel to a bottom portion of the bag. Instead, Aoyama appears to disclose only that the bag expands outward directly and does not define a channel that guides the flow of liquid as it is introduced.

The applicants therefore respectfully submit that new claim 18 also is novel and non-obvious over the cited references.

No narrowing interpretations implied

The foregoing remarks are intended to assist the Office in examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual claim language should be considered in each case. Furthermore, the remarks are not to be considered exhaustive of the facets of the invention which are rendered patentable, being only

examples of certain novel features and differences, which the applicants have opted to comment on as illustrative examples.

Furthermore, in commenting on the references and in order to facilitate a better understanding of the differences that are expressed in the claims, certain details of distinction between the references and particular subject matter of the present application may have been commented on, even though such differences do not appear in all of the claims. It is not intended by commenting on any such distinctions to create any implied limitations in any particular claims of the present application.

Conclusion: Claims 1-7 and 10-18 are in condition for allowance

In view of the above comments and remarks, the applicants respectfully submit that pending claims 1-7 and 10-18 are all presently in condition for allowance. The applicants therefore hereby request that the rejection of claims 1-7 and 9-16 be reconsidered and withdrawn and that claims 1-7 and 10-18 be allowed.

The Director is authorized to charge any fee deficiency required by this paper or any paper in the prosecution or appeal of this application or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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